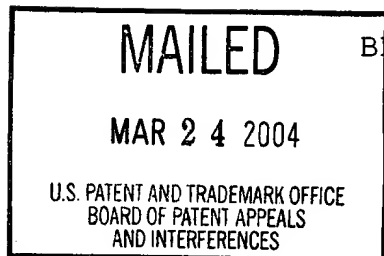


The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 33

UNITED STATES PATENT AND TRADEMARK OFFICE



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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte PAUL DRZAIC  
and  
RUSSEL J. WILCOX

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Appeal No. 2004-0103  
Application No. 09/289,507

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ON BRIEF

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Before KIMLIN, WALTZ and TIMM, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 38-40, 42, 51, 54-65 and 68-79. Appellants do not appeal the examiner's rejection of claim 41, and claims 66 and 67 stand objected to by the examiner as being dependent upon a rejected base claim.

Claim 38 is illustrative:

38. A multichromatic electrophoretic display element comprising:

a first capsule including a first plurality of white particles and a second plurality of particles having a first optical property visually different from white; and

a second capsule including a third plurality of particles having a second optical property and a fourth plurality of particles having a third optical property;

wherein the element presents a visual display in response to the application of an electrical signal to at least one of said first capsule and said second capsule; and

wherein a white visual display is provided by at least said first plurality of white particles.

The examiner relies upon the following reference as evidence of obviousness:

Jacobson et al. (Jacobson)	5,961,804	Oct. 5, 1999
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Appellants' claimed invention is directed to a multichromatic electrophoretic display element comprising first and second capsules. Each capsule comprises at least two pluralities of particles having different optical properties. The first capsule contains a plurality of white particles and a plurality of particles having an optical property other than white, whereas the second capsule contains at least two pluralities of particles, one of which has an optical property different than the two pluralities of particles in the first capsule. The

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electrophoretic display element may also contain a third capsule (claim 42).

Appealed claims 40, 63, 64 and 68 stand rejected under 35 U.S.C. § 112, first paragraph, description requirement. Claims 38-40, 42, 51, 54-65 and 68-79 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jacobson.

Appellants submit that the following groups of claims stand or fall together: (I) claims 38-39, 42, 51, 54-56, 61-62, 65 and 69-75; (II) claims 57, 58, 76 and 77; (III) claims 40 and 68; (IV) claims 63 and 64; (V) claims 59 and 78; and (VI) claims 60 and 79.

We have thoroughly reviewed the respective positions advanced by appellants and the examiner. In so doing, we will sustain the examiner's rejection of claims 40 and 68 under § 112, first paragraph, but we will not sustain the examiner's rejection of claims 63 and 64 under § 112, first paragraph. Also, we are in complete agreement with the examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 over the Jacobson reference. Accordingly, we will sustain the examiner's rejection of all the

appealed claims under § 103 for essentially those reasons expressed by the examiner.

We consider first the examiner's rejection of claims 40 and 68 under § 112, first paragraph. We agree with the examiner that the original specification does not fairly convey to one of ordinary skill in the art that appellants had in their possession the claimed subject matter wherein the first capsule includes white and black particles and the second capsule includes black particles and particles other than black or white. Appellants rely upon page 6 of the present specification, lines 2-24, for teaching that "the claimed first and second capsules may include black particles, i.e., that the 'second' and 'fourth' optical properties 'have a black visual appearance'" (page 6 of Brief, last paragraph). However, while it is true that the cited portion of the specification discloses that the third optical property has a white visual appearance, claim 40 recites that "the third optical properties have a black visual appearance" (emphasis added). Likewise, while claim 68 recites that "the first and fifth plurality of particles optical properties have a black visual appearance," the specification describes that the particles having a first optical property have a white visual

appearance. Accordingly, appellants' argument is not commensurate with the subject matter defined by claims 40 and 68.

The examiner's § 112, first paragraph, rejection of claims 63 and 64 is another matter. We agree with appellants that the present specification, particularly at page 13, lines 3-11, describes the red, green, blue, yellow, cyan and magenta visual appearances specified in claims 63 and 64. While the examiner maintains that "there is no such drawing to illustrate the claimed features" (sentence bridging pages 10 and 11 of Answer), specific drawings and examples are not necessary to fulfill the description requirement of § 112, first paragraph. It is only necessary that, as here, the specification as a whole reasonably conveys to one of ordinary skill in the art that appellants had in their possession the claimed subject matter at the time of filing the application.

We will sustain the examiner's rejection of all the appealed claims under 35 U.S.C. § 103 as being unpatentable over Jacobson. Jacobson, like appellants, discloses a multichromatic electrophoretic display element comprising a plurality of microcapsules which correspond to the presently claimed first, second and third

capsules. In particular, Jacobson discloses the following at column 3, lines 14 et seq.:

The displays of the present invention may include more than one type of particle. That is, the particles within each microcapsule may be heterogeneous in terms of physical properties and/or color. In this way it is, for example, possible to omit reliance on the carrier fluid for one of the display colors, using only differently colored particles.

Jacobson further discloses that "[a] wide range of pigment particles can serve as the internal-phase microparticles, the primary criteria governing their choice being appropriate charge, size, color, and amenability to processing as described below" (column 4, lines 9-12). Also, the reference teaches that "[f]or example, one can use polyethylene for white microparticles and NYLON polymer for black microparticles" (column 5, lines 35-38). Accordingly, based on the Jacobson reference considered as a whole, we find that the reference generically teaches a multichromatic electrophoretic display element comprising the claimed first, second and third capsules which contain white, black, and variously colored microparticles. While Jacobson may not exemplify particular arrangements of capsules containing specific colors as presently claimed, we agree with the examiner that, prima facie, one of ordinary skill in the art would have

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found it obvious to utilize specific colors in accordance with a particular application.

Appellants attempt to distinguish the claimed invention over Jacobson by contending that "[a] skilled artisan would realize that, in the instant invention, a true white tonality is already provided by virtue of a plurality of true white particles" (page 11 of Brief, last paragraph). However, as noted above, Jacobson expressly discloses the use of white microparticles (column 5, line 37). Also, we find that one of ordinary skill in the art would have found it obvious to eliminate the reflective-enhancing materials of some of Jacobson's embodiments along with their attendant advantage and, moreover, the claims on appeal do not preclude the use of Jacobson's reflective enhancing materials.

Regarding the separately argued features of various dependent claims, we agree with the reasoning set forth in the Examiner's Answer.

As a final point, we note that appellants base no argument upon objective evidence of nonobviousness, such as unexpected results.

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In conclusion, based on the foregoing and the reasons set forth by the examiner, the examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

Edward C. Kimlin  
EDWARD C. KIMLIN  
Administrative Patent Judge

THOMAS A. WALTZ  
Administrative Patent Judge

BOARD OF PATENT  
APPEALS AND  
INTERFERENCES

  
CATHERINE TIMM  
Administrative Patent Judge

ECK:clm



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